

APPENDIX A

OMB Approval Number: 2050-0095  
Approved for Use Through: 1/92

# PA Scoresheets

NYD 000511683

Site Name: Tioga Casting  
Facilities  
CERCLIS ID No.: [REDACTED]  
Street Address: 1 Foundry St.  
City/State/Zip: Owego ~~County~~ NY  
Tioga County 13827

Investigator: Mary LaHka  
Agency/Organization: EPA-Reg 2.  
Street Address: 26 Federal Plaza  
City/State/Zip: NY, NY  
Date: July 22, 93

356264



## SOURCE EVALUATION

Source No.:	Source Name: <u>landfill</u>	Source Waste Quantity (WQ) Calculations:
Source Description: <u>landfill permitted for foundry wastes ~1 acre</u>		$1/.078 = 12.82$

Source No.:	Source Name: <u>DRUMS</u>	Source Waste Quantity (WQ) Calculations:
Source Description: <u>100-11055 gallon drums</u> <u>~80 of these were removed in 1990 by DEC</u>		<u>Assume all drums removed b/c the 2 reports may have estimated the actual # of drums differently.</u>

Source No.:	Source Name: <u>Waste Pile</u>	Source Waste Quantity (WQ) Calculations:
Source Description: <u>Cupola Dust.</u> <u>1989 SI report cites 34 tons of cupola dust stored in building</u> <u>DEC report states ~30 tons of cupola dust removed from site in 1990</u>		<u>Assume all dust removed (as each report may have estimated the amount of dust differently)</u>
		Site WC: <u>18</u>

PA TABLE 1: WASTE CHARACTERISTICS (WC) SCORES

PA Table 1a: WC Scores for Single Source Sites and Formulas for Multiple Source Sites

TIER	SOURCE TYPE	SINGLE SOURCE SITES (assigned WC scores)			MULTIPLE SOURCE SITES
		WC = 18	WC = 32	WC = 100	
CONCENTRATION	N/A	$\leq 100$ lb	$> 100$ to 10,000 lb	$> 10,000$ lb	$lb + 1$
QUANTITY	N/A	$\leq 500,000$ lb	$> 500,000$ to 50 million lb	$> 50$ million lb	$lb + 5,000$
VOLUME	Landfill	$\leq 6.75$ million $ft^3$ $\leq 250,000$ $yd^3$	$> 6.75$ million to 675 million $ft^3$ $> 250,000$ to 25 million $yd^3$	$> 675$ million $ft^3$ $> 25$ million $yd^3$	$ft^3 + 67,500$ $yd^3 + 2,500$
	Surface impoundment	$\leq 6,750$ $ft^3$ $\leq 250$ $yd^3$	$> 6,750$ to 675,000 $ft^3$ $> 250$ to 25,000 $yd^3$	$> 675,000$ $ft^3$ $> 25,000$ $yd^3$	$ft^3 + 67.5$ $yd^3 + 2.5$
	Drums	$\leq 1,000$ drums	$> 1,000$ to 100,000 drums	$> 100,000$ drums	drums + 10
	Tanks and non-drum containers	$\leq 50,000$ gallons	$> 50,000$ to 5 million gallons	$> 5$ million gallons	gallons + 500
	Contaminated soil	$\leq 6.75$ million $ft^3$ $\leq 250,000$ $yd^3$	$> 6.75$ million to 675 million $ft^3$ $> 250,000$ to 25 million $yd^3$	$> 675$ million $ft^3$ $> 25$ million $yd^3$	$ft^3 + 67,500$ $yd^3 + 2,500$
	Pile	$\leq 6,750$ $ft^3$ $\leq 250$ $yd^3$	$> 6,750$ to 675,000 $ft^3$ $> 250$ to 25,000 $yd^3$	$> 675,000$ $ft^3$ $> 25,000$ $yd^3$	$ft^3 + 67.5$ $yd^3 + 2.5$
	Other	$\leq 6,750$ $ft^3$ $\leq 250$ $yd^3$	$> 6,750$ to 675,000 $ft^3$ $> 250$ to 25,000 $yd^3$	$> 675,000$ $ft^3$ $> 25,000$ $yd^3$	$ft^3 + 67.5$ $yd^3 + 2.5$
AREA	Landfill	$\leq 340,000$ $ft^2$ $\leq 7.8$ acres	$> 340,000$ to 34 million $ft^2$ $> 7.8$ to 780 acres	$> 34$ million $ft^2$ $> 780$ acres	$ft^2 + 3,400$ acres + 0.078
	Surface impoundment	$\leq 1,300$ $ft^2$ $\leq 0.029$ acres	$> 1,300$ to 130,000 $ft^2$ $> 0.029$ to 2.9 acres	$> 130,000$ $ft^2$ $> 2.9$ acres	$ft^2 + 13$ acres + 0.00029
	Contaminated soil	$\leq 3.4$ million $ft^2$ $\leq 78$ acres	$> 3.4$ million to 340 million $ft^2$ $> 78$ to 7,800 acres	$> 340$ million $ft^2$ $> 7,800$ acres	$ft^2 + 34,000$ acres + 0.78
	Pile*	$\leq 1,300$ $ft^2$ $\leq 0.029$ acres	$> 1,300$ to 130,000 $ft^2$ $> 0.029$ to 2.9 acres	$> 130,000$ $ft^2$ $> 2.9$ acres	$ft^2 + 13$ acres + 0.00029
	Land treatment	$\leq 27,000$ $ft^2$ $\leq 0.62$ acres	$> 27,000$ to 2.7 million $ft^2$ $> 0.62$ to 62 acres	$> 2.7$ million $ft^2$ $> 62$ acres	$ft^2 + 270$ acres + 0.0062

1 ton = 2,000 lb = 1  $yd^3$  = 4 drums = 200 gallons

\* Use area of land surface under pile, not surface area of pile.

PA Table 1b: WC Scores for Multiple Source Sites

WQ Total	WC Score
$> 0$ to 100	18
$> 100$ to 10,000	32
$> 10,000$	100

## GROUND WATER PATHWAY SCORESHEET

Pathway Characteristics	
Do you suspect a release (see Ground Water Pathway Criteria List, page 7)?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Is the site located in karst terrain?	Yes <input type="checkbox"/> No <input type="checkbox"/>
Depth to aquifer: <u>211</u>	<u>1000</u> ft
Distance to the nearest drinking water well:	

## LIKELIHOOD OF RELEASE

- SUSPECTED RELEASE:** If you suspect a release to ground water (see page 7), assign a score of 550. Use only column A for this pathway.
- NO SUSPECTED RELEASE:** If you do not suspect a release to ground water, and the site is in karst terrain or the depth to aquifer is 70 feet or less, assign a score of 500; otherwise, assign a score of 340. Use only column B for this pathway.

A	B	References
Suspected Release	No Suspected Release	
(550)	(500 = 340)	
550		
LR = 550		

## TARGETS

- PRIMARY TARGET POPULATION:** Determine the number of people served by drinking water wells that you suspect have been exposed to a hazardous substance from the site (see Ground Water Pathway Criteria List, page 7).  
- 1990 DEC sampled non-municipal wells - NO CONTAMINATION people x 10 = 0
- SECONDARY TARGET POPULATION:** Determine the number of people served by drinking water wells that you do NOT suspect have been exposed to a hazardous substance from the site, and assign the total population score from PA Table 2.  
Are any wells part of a blended system? Yes ☐ No ☐  
If yes, attach a page to show apportionment calculations.
- NEAREST WELL:** If you have identified a primary target population for ground water, assign a score of 50; otherwise, assign the Nearest Well score from PA Table 2. If no drinking water wells exist within 4 miles, assign a score of zero.
- WELLHEAD PROTECTION AREA (WHPA):** If any source lies within or above a WHPA, or if you have identified any primary target well within a WHPA, assign a score of 20; assign 5 if neither condition holds but a WHPA is present within 4 miles; otherwise assign zero.
- RESOURCES** NO SOLG SAME AS SUPER W/ W 3 miles of SW 1984 SI

0		
176		
9		
0		
5		
T = 190		

## WASTE CHARACTERISTICS

- A.** If you have identified any primary target for ground water, assign the waste characteristics score calculated on page 4, or a score of 32, whichever is GREATER; do not evaluate part B of this factor.
- B.** If you have NOT identified any primary target for ground water, assign the waste characteristics score calculated on page 4.

	(100 = 32)	
	(100, 32 = 100)	(100, 32 = 100)
18		
WC = 18		

GROUND WATER PATHWAY SCORE:

$$\frac{LR \times T \times WC}{82,500}$$

(subject to a maximum of 100)

22.8

See attached GW map.

See attached GW map from 1989 SI report - data available for all but private residences w/in water rings

PA TABLE 2: VALUES FOR SECONDARY GROUND WATER TARGET POPULATIONS

PA Table 2a: Non-Karst Aquifers

Distance from Site	Population	Nearest Well (choose highest)	Population Served by Wells Within Distance Category										Population Value
			1 to 10	11 to 30	31 to 100	101 to 300	301 to 1,000	1,001 to 3,000	3,001 to 10,000	10,001 to 30,000	30,001 to 100,000	Greater than 100,000	
0 to 1/4 mile	?	20	1	2	5	16	52	163	521	1,633	5,214	16,325	?
> 1/4 to 1/2 mile	?	18	1	1	3	10	32	101	323	1,012	3,233	10,121	?
> 1/2 to 1 mile	5000	9	1	1	2	5	17	52	167	522	1,668	5,224	167
> 1 to 2 miles	50	5	1	1	1	3	9	29	94	294	939	2,938	1
> 2 to 3 miles	430	3	1	1	1	2	7	21	68	212	678	2,122	7
> 3 to 4 miles	200	2	1	1	1	1	4	13	42	131	417	1,306	1
Nearest Well =		9											Score = 176

PA Table 2b: Karst Aquifers

Distance from Site	Population	Nearest Well (use 20 for karst)	Population Served by Wells Within Distance Category										Population Value
			1 to 10	11 to 30	31 to 100	101 to 300	301 to 1,000	1,001 to 3,000	3,001 to 10,000	10,001 to 30,000	30,001 to 100,000	Greater than 100,000	
0 to 1/4 mile	_____	20	1	2	5	16	52	163	521	1,633	5,214	16,325	_____
> 1/4 to 1/2 mile	_____	20	1	1	3	10	32	101	323	1,012	3,233	10,121	_____
> 1/2 to 1 mile	_____	20	1	1	3	8	26	82	261	816	2,607	8,162	_____
> 1 to 2 miles	_____	20	1	1	3	8	26	82	261	816	2,607	8,162	_____
> 2 to 3 miles	_____	20	1	1	3	8	26	82	261	816	2,607	8,162	_____
> 3 to 4 miles	_____	20	1	1	3	8	26	82	261	816	2,607	8,162	_____
Nearest Well =													Score =

# **SURFACE WATER PATHWAY LIKELIHOOD OF RELEASE AND DRINKING WATER THREAT SCORESHEET**

**Pathway Characteristics**

Do you suspect a release (see Surface Water Pathway Criteria List, page 11)? Yes ☒ No ☐

Distance to surface water: \_\_\_\_\_ ft

Flood frequency: \_\_\_\_\_ yrs

What is the downstream distance to the nearest drinking water intake? 0 miles

Nearest fishery? 2 miles      Nearest sensitive environment? 2.2 miles

## **LIKELIHOOD OF RELEASE**

- SUSPECTED RELEASE:** If you suspect a release to surface water (see page 11), assign a score of 550. Use only column A for this pathway.
- NO SUSPECTED RELEASE:** If you do not suspect a release to surface water, use the table below to assign a score based on distance to surface water and flood frequency. Use only column B for this pathway.

Distance to surface water $\leq$ 2,500 feet	500
Distance to surface water $>$ 2,500 feet, and	
Site in annual or 10-year floodplain	500
Site in 100-year floodplain	400
Site in 500-year floodplain	300
Site outside 500-year floodplain	100

A Suspected Release	B No Suspected Release
(550) 550	(500, 400, 300 or 100)
(550)	(500, 400, 300 or 100)
LR = 550	

although the amount overlaid route is over 2000'. Release suspected due to the uncontrolled state of waste deposition - current releases unlikely to be waste piles have been removed

## **DRINKING WATER THREAT TARGETS**

- Record the water body type, flow (if applicable), and number of people served by each drinking water intake within the target distance limit. If there is no drinking water intake within the target distance limit, factors 4, 5, and 6 each receive zero scores.

Intake Name	Water Body Type	Flow	People Served
NONE - SEE 1989 SI Report		cfs	
		cfs	
		cfs	

- PRIMARY TARGET POPULATION:** If you suspect any drinking water intake listed above has been exposed to a hazardous substance from the site (see Surface Water Pathway Criteria List, page 11), list the intake name(s) and calculate the factor score based on the total population served.

0 people  $\times$  10 = 0

- SECONDARY TARGET POPULATION:** Determine the number of people served by drinking water intakes that you do NOT suspect have been exposed to a hazardous substance from the site, and assign the total population score from PA Table 3.

Are any intakes part of a blended system? Yes ☐ No ☒ N/A.  
If yes, attach a page to show apportionment calculations.

- NEAREST INTAKE:** If you have identified a primary target population for the drinking water threat (factor 4), assign a score of 50; otherwise, assign the Nearest Intake score from PA Table 3. If no drinking water intake exists within the target distance limit, assign a score of zero.

- RESOURCES**

0	
0	
0	
5	
5	

Ref 43

Water from intakes within 2.5 miles of site is used for irrigation ~105 acres of land.

No intakes.

PA TABLE 3: VALUES FOR SECONDARY SURFACE WATER TARGET POPULATIONS

Surface Water Body Flow (see PA Table 4)	Population	Nearest Intake (choose highest)	Population Served by Intakes Within Flow Category											Population Value
			1 to 30	31 to 100	101 to 300	301 to 1,000	1,001 to 3,000	3,001 to 10,000	10,001 to 30,000	30,001 to 100,000	100,001 to 300,000	300,001 to 1,000,000	Greater than 1,000,000	
<10 cfs		20	2	5	16	52	163	521	1,633	5,214	16,325	52,136	163,246	
10 to 100 cfs		2	1	1	2	5	16	52	163	521	1,633	5,214	16,325	
>100 to 1,000 cfs		1	0	0	1	1	2	5	16	52	163	521	1,633	
>1,000 to 10,000 cfs		0	0	0	0	0	1	1	2	5	16	52	163	
>10,000 cfs or Great Lakes		0	0	0	0	0	0	1	1	2	5	16		
3-mile Mixing Zone		10	1	3	8	26	82	261	816	2,607	8,162	26,088	81,663	

Score =

Nearest Intake =

PA TABLE 4: SURFACE WATER TYPE / FLOW CHARACTERISTICS WITH DILUTION WEIGHTS FOR SECONDARY SURFACE WATER SENSITIVE ENVIRONMENTS

Type of Surface Water Body		Dilution Weight
Water Body Type	OR Flow	
minimal stream	< 10 cfs	1
small to moderate stream	10 to 100 cfs	0.1
moderate to large stream	> 100 to 1,000 cfs	N/A
large stream to river	> 1,000 to 10,000 cfs	N/A
large river	> 10,000 cfs	N/A
3-mile mixing zone of quiet flowing streams or rivers	10 cfs or greater	N/A
coastal tidal water (harbors, sounds, bays, etc.), ocean, or Great Lakes	N/A	N/A

**SURFACE WATER PATHWAY (continued)  
HUMAN FOOD CHAIN THREAT SCORESHEET**

**LIKELIHOOD OF RELEASE**

Enter Surface Water Likelihood of Release score from page 12.

LR =

A	B
Suspected Release (300)	No Suspected Release (500,000,000 = 100)
550	

References

**HUMAN FOOD CHAIN THREAT TARGETS**

8. Record the water body type and flow (if applicable) for each fishery within the target distance limit. If there is no fishery within the target distance limit, assign a Targets score of 0 at the bottom of the page.

Fishery Name	Water Body Type	Flow
Oswego Creek	Class C/B	UNKNOWN
Susquehanna River	Class C	cfs
		cfs
		cfs
		cfs

1989 SI Report  
CFS UNKNOWN

9. PRIMARY FISHERIES: If you suspect any fishery listed above has been exposed to a hazardous substance from the site (see Surface Water Criteria List, page 11), assign a score of 300 and do not evaluate Factor 10. List the primary fisheries:

**10. SECONDARY FISHERIES**

- A. If you suspect a release to surface water and have identified a secondary fishery but no primary fishery, assign a score of 210.
- B. If you do not suspect a release, assign a Secondary Fisheries score from the table below using the lowest flow at any fishery within the target distance limit.

Lowest Flow	Secondary Fisheries Score
< 10 cfs	210
10 to 100 cfs	30
> 100 cfs, coastal tidal waters, oceans, or Great Lakes	12

T =

210	210, 30, 12 = 0
-----	-----------------

- Release suspected  
BO as to assume  
a "WORST CASE  
SCENARIO", but  
distance to SW is  
2200', & slope  
is small (3%)  
while worst case  
were once uncertain  
They have been  
removed & actual  
migration over  
2000' is unlikely  
to affect fishery  
downstream



**SURFACE WATER PATHWAY (continued)  
ENVIRONMENTAL THREAT SCORESHEET**

		A	B	
<b>LIKELIHOOD OF RELEASE</b>		Suspected Release	No Suspected Release	Reference
Enter Surface Water Likelihood of Release score from page 12.	LR =	550		

**ENVIRONMENTAL THREAT TARGETS**

11. Record the water body type and flow (if applicable) for each surface water sensitive environment within the target distance limit (see PA Tables 4 and 5). If there is no sensitive environment within the target distance limit, assign a Targets score of 0 at the bottom of the page.

Environment Name	Water Body Type	Flow
		cfs
		cfs
		cfs
		cfs
		cfs

12. PRIMARY SENSITIVE ENVIRONMENTS: If you suspect any sensitive environment listed above has been exposed to a hazardous substance from the site (see Surface Water Criteria List, page 11), assign a score of 300 and do not evaluate factor 13. List the primary sensitive environments:

NONE - NO WETLANDS OR SENSITIVE ENVIRONMENTS W/IN 2 MILES. ∴ NOT LIKELY TO BE 0 affected

13. SECONDARY SENSITIVE ENVIRONMENTS: If sensitive environments are present, but none is a primary sensitive environment, evaluate Secondary Sensitive Environments based on flow.

- A. For secondary sensitive environments on surface water bodies with flows of 100 cfs or less, assign scores as follows, and do not evaluate part B of this factor:

Flow	Duration Weight (PA Table 4)	Environment Type and Value (PA Tables 5 and 6)	Total
cfs	x		=
cfs	x		=
cfs	x		=
cfs	x		=
cfs	x		=

Sum =

- B. If all secondary sensitive environments are located on surface water bodies with flows > 100 cfs, assign a score of 10.

T =

*Explicit data for this information is not available, however, a NYSED map from the Fish & wild life service. does NOT show any significant wetland /sensitive environments within the 15 mile Target distance Limit.  
Ref 36. 1989 SI Report.*

PA TABLE 5: SURFACE WATER AND AIR PATHWAY SENSITIVE ENVIRONMENTS VALUES

<i>Sensitive Environment</i>	<i>Assigned Value</i>
Critical habitat for Federally designated endangered or threatened species	100
Marine Sanctuary	
National Park	
Designated Federal Wilderness Area	
Ecologically important areas identified under the Coastal Zone Wilderness Act	
Sensitive Areas identified under the National Estuary Program or Near Coastal Water Program of the Clean Water Act	
Critical Areas identified under the Clean Lakes Program of the Clean Water Act (subareas in lakes or entire small lakes)	
National Monument (air pathway only)	
National Seashore Recreation Area	
National Lakeshore Recreation Area	
Habitat known to be used by Federally designated or proposed endangered or threatened species	75
National Preserve	
National or State Wildlife Refuge	
Unit of Coastal Barrier Resources System	
Federal land designated for the protection of natural ecosystems	
Administratively Proposed Federal Wilderness Area	
Spawning areas critical for the maintenance of fish/shellfish species within a river system, bay, or estuary	
Migratory pathways and feeding areas critical for the maintenance of anadromous fish species in a river system	
Terrestrial areas utilized for breeding by large or dense aggregations of vertebrate animals (air pathway) or semi-aquatic foragers (surface water pathway)	
National river reach designated as Recreational	
Habitat known to be used by State designated endangered or threatened species	50
Habitat known to be used by a species under review as to its Federal endangered or threatened status	
Coastal Barrier (partially developed)	
Federally designated Scenic or Wild River	
State land designated for wildlife or game management	25
State designated Scenic or Wild River	
State designated Natural Area	
Particular areas, relatively small in size, important to maintenance of unique biotic communities	
State designated areas for protection/maintenance of aquatic life under the Clean Water Act	5
Wetlands	See PA Table 6 (Surface Water Pathway) or PA Table 9 (Air Pathway)

PA TABLE 6: SURFACE WATER PATHWAY  
WETLANDS FRONTAGE VALUES

<i>Total Length of Wetlands</i>	<i>Assigned Value</i>
Less than 0.1 mile	0
0.1 to 1 mile	25
Greater than 1 to 2 miles	50
Greater than 2 to 3 miles	75
Greater than 3 to 4 miles	100
Greater than 4 to 8 miles	150
Greater than 8 to 12 miles	250
Greater than 12 to 16 miles	350
Greater than 16 to 20 miles	450
Greater than 20 miles	500

**SURFACE WATER PATHWAY (concluded)  
WASTE CHARACTERISTICS, THREAT, AND PATHWAY SCORE SUMMARY**

	A <i>Suspected Release</i>	B <i>No Suspected Release</i>
<b>WASTE CHARACTERISTICS</b>	(100 or 32)	
14. A. If you have identified any primary target for surface water (pages 12, 14, or 15), assign the waste characteristics score calculated on page 4, or a score of 32, whichever is GREATER; do not evaluate part B of this factor.	—	
	(100, 32, or 18)	(100, 32, or 18)
B. If you have NOT identified any primary target for surface water, assign the waste characteristics score calculated on page 4.	18	
WC =	18	

**SURFACE WATER PATHWAY THREAT SCORES**

Threat	<i>Likelihood of Release (LR) Score (from page 12)</i>	<i>Targets (T) Score (pages 12, 14, 15)</i>	<i>Pathway Waste Characteristics (WC) Score (determined above)</i>	<i>Threat Score LR x T x WC / 82,500</i>
Drinking Water	550	5	18	.6 <small>(subject to a maximum of 100)</small>
Human Food Chain	550	210	18	25.2 <small>(subject to a maximum of 100)</small>
Environmental	550	0	18	0 <small>(subject to a maximum of 100)</small>

**SURFACE WATER PATHWAY SCORE**  
(Drinking Water Threat + Human Food Chain Threat + Environmental Threat)

(subject to a maximum of 100)  
**25.8**

## SOIL EXPOSURE PATHWAY SCORESHEET

Pathway Characteristics	
Do any people live on or within 200 ft of areas of suspected contamination?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Do any people attend <u>school</u> or daycare on or within 200 ft of areas of suspected contamination? <u>~300</u>	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Is the facility active? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> If yes, estimate the number of workers: _____	

## LIKELIHOOD OF EXPOSURE

1. SUSPECTED CONTAMINATION: Surficial contamination can generally be assumed, and a score of 550 assigned. Assign zero only if the absence of surficial contamination can be confidently demonstrated.

LE =

Suspected  
Contamination  
(550 or 0)

550

## References

- NYSDEC sample  
soil from school  
grounds & found  
no sig. levels of  
lead or cadmium  
- fence erected  
around the site

## RESIDENT POPULATION THREAT TARGETS

2. RESIDENT POPULATION: Determine the number of people occupying residences or attending school or daycare on or within 200 feet of areas of suspected contamination (see Soil Exposure Pathway Criteria List, page 18).  
0 people  $\times 10 =$
3. RESIDENT INDIVIDUAL: If you have identified a resident population (factor 2), assign a score of 50; otherwise, assign a score of 0.
4. WORKERS: Use the following table to assign a score based on the total number of workers at the facility and nearby facilities with suspected contamination:

Number of Workers	Score
0	0
1 to 100	5
101 to 1,000	10
>1,000	15

facility  
inactive

5. TERRESTRIAL SENSITIVE ENVIRONMENTS: Use PA Table 7 to assign a value for each terrestrial sensitive environment on an area of suspected contamination:

Terrestrial Sensitive Environment Type	Value

Sum =

6. RESOURCES

T =

## WASTE CHARACTERISTICS

7. Assign the waste characteristics score calculated on page 4.

WC =

(100, 32, or 10)

18

RESIDENT POPULATION THREAT SCORE:

$$\frac{LE \times T \times WC}{82,500}$$

(subject to a maximum of 100)

.6

NEARBY POPULATION THREAT SCORE:

(4, 3, or 1)

1

SOIL EXPOSURE PATHWAY SCORE:

Resident Population Threat + Nearby Population Threat

(subject to a maximum of 100)

1.6

PA TABLE 7: SOIL EXPOSURE PATHWAY  
TERRESTRIAL SENSITIVE ENVIRONMENT VALUES

<i>Terrestrial Sensitive Environment</i>	<i>Assigned Value</i>
Terrestrial critical habitat for Federally designated endangered or threatened species	100
National Park	
Designated Federal Wilderness Area	
National Monument	
Terrestrial habitat known to be used by Federally designated or proposed threatened or endangered species	75
National Preserve (terrestrial)	
National or State terrestrial Wildlife Refuge	
Federal land designated for protection of natural ecosystems	
Administratively proposed Federal Wilderness Area	
Terrestrial areas utilized by large or dense aggregations of animals (vertebrate species) for breeding	
Terrestrial habitat used by State designated endangered or threatened species	50
Terrestrial habitat used by species under review for Federal designated endangered or threatened status	
State lands designated for wildlife or game management	25
State designated Natural Areas	
Particular areas, relatively small in size, important to maintenance of unique biotic communities	

## AIR PATHWAY SCORESHEET

Pathway Characteristics	
Do you suspect a release (see Air Pathway Criteria List, page 211)?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Distance to the nearest individual:	_____ ft

## LIKELIHOOD OF RELEASE

1. SUSPECTED RELEASE: If you suspect a release to air (see page 211), assign a score of 550. Use only column A for this pathway.
2. NO SUSPECTED RELEASE: If you do not suspect a release to air, assign a score of 500. Use only column B for this pathway.

A	B
Suspected Release (550)	No Suspected Release (500)
	500
LR =	500

References

facility is inactive

## TARGETS

3. PRIMARY TARGET POPULATION: Determine the number of people subject to exposure from a suspected release of hazardous substances to the air.  
\_\_\_\_\_ people  $\times 10 =$
4. SECONDARY TARGET POPULATION: Determine the number of people not suspected to be exposed to a release to air, and assign the total population score using PA Table 8.
5. NEAREST INDIVIDUAL: If you have identified any Primary Target Population for the air pathway, assign a score of 50; otherwise, assign the Nearest Individual score from PA Table 8.
6. PRIMARY SENSITIVE ENVIRONMENTS: Sum the sensitive environment values (PA Table 5) and wetland acreage values (PA Table 9) for environments subject to exposure from a suspected release to the air.

Sensitive Environment Type	Value
_____	_____
_____	_____
_____	_____

Sum =

7. SECONDARY SENSITIVE ENVIRONMENTS: Use PA Table 10 to determine the score for secondary sensitive environments.
8. RESOURCES

T =

	13
(50, 20, 7, 2, 1, = 0)	(20, 7, 2, 1, = 0)
	2
Sum =	
	0
(5 = 0)	(5 = 0)
	5
T =	20

## WASTE CHARACTERISTICS

9. A. If you have identified any Primary Target for the air pathway, assign the waste characteristics score calculated on page 4, or a score of 32, whichever is GREATER; do not evaluate part B of this factor.
- B. If you have NOT identified any Primary Target for the air pathway, assign the waste characteristics score calculated on page 4.

WC =

(100 = 32)	
(100, 32, = 18)	(100, 32, = 18)
	18
WC =	18

AIR PATHWAY SCORE:

$$\frac{LR \times T \times WC}{82,500}$$

(maximum is a maximum of 100)

2.18

Ref 39 1989 SI Report.

PA TABLE 8: VALUES FOR SECONDARY AIR TARGET POPULATIONS

Distance from Site	Population	Nearest Individual (choose highest)	Population Within Distance Category												Population Value
			1 to 10	11 to 30	31 to 100	101 to 300	301 to 1,000	1,001 to 3,000	3,001 to 10,000	10,001 to 30,000	30,001 to 100,000	100,001 to 300,000	300,001 to 1,000,000	Greater than 1,000,000	
Onsite	<u>0</u>	20	1	2	5	18	52	163	521	1,633	5,214	16,326	52,138	163,246	<u>0</u>
> 0 to 1/4 mile	<u>0</u>	20	1	1	1	4	13	41	130	408	1,303	4,081	13,034	40,811	<u>0</u>
> 1/4 to 1/2 mile	<u>1691</u>	②	0	0	1	1	3	⑨	28	88	282	882	2,816	8,815	<u>9</u>
> 1/2 to 1 mile	<u>2673</u>	1	0	0	0	1	1	③	8	26	83	261	834	2,612	<u>3</u>
> 1 to 2 miles	<u>0</u>	0	0	0	0	0	1	1	3	8	27	83	268	833	<u>0</u>
> 2 to 3 miles	<u>0</u>	0	0	0	0	0	1	1	1	4	12	38	120	376	<u>0</u>
> 3 to 4 miles	<u>5115</u>	0	0	0	0	0	0	1	①	2	7	23	73	229	<u>1</u>
Nearest Individual =		2	Score =												13

A-45

PA TABLE 9: AIR PATHWAY VALUES FOR WETLAND AREA

Wetland Area	Assigned Value
Less than 1 acre	0
1 to 50 acres	25
Greater than 50 to 100 acres	75
Greater than 100 to 150 acres	125
Greater than 150 to 200 acres	175
Greater than 200 to 300 acres	250
Greater than 300 to 400 acres	350
Greater than 400 to 500 acres	450
Greater than 500 acres	500

No wetlands identified

PA TABLE 10: DISTANCE WEIGHTS AND CALCULATIONS FOR AIR PATHWAY SECONDARY SENSITIVE ENVIRONMENTS

	Distance	Sensitive Environment Type and Value (from PA Table 5 or 9)			Product
Distance	Weight				
Onsite	0.10	x			
		x			
		x			
0-1/4 mi	0.025	x			
		x			
		x			
1/4-1/2mi	0.0054	x			
		x			
		x			
Total Environments Score =					

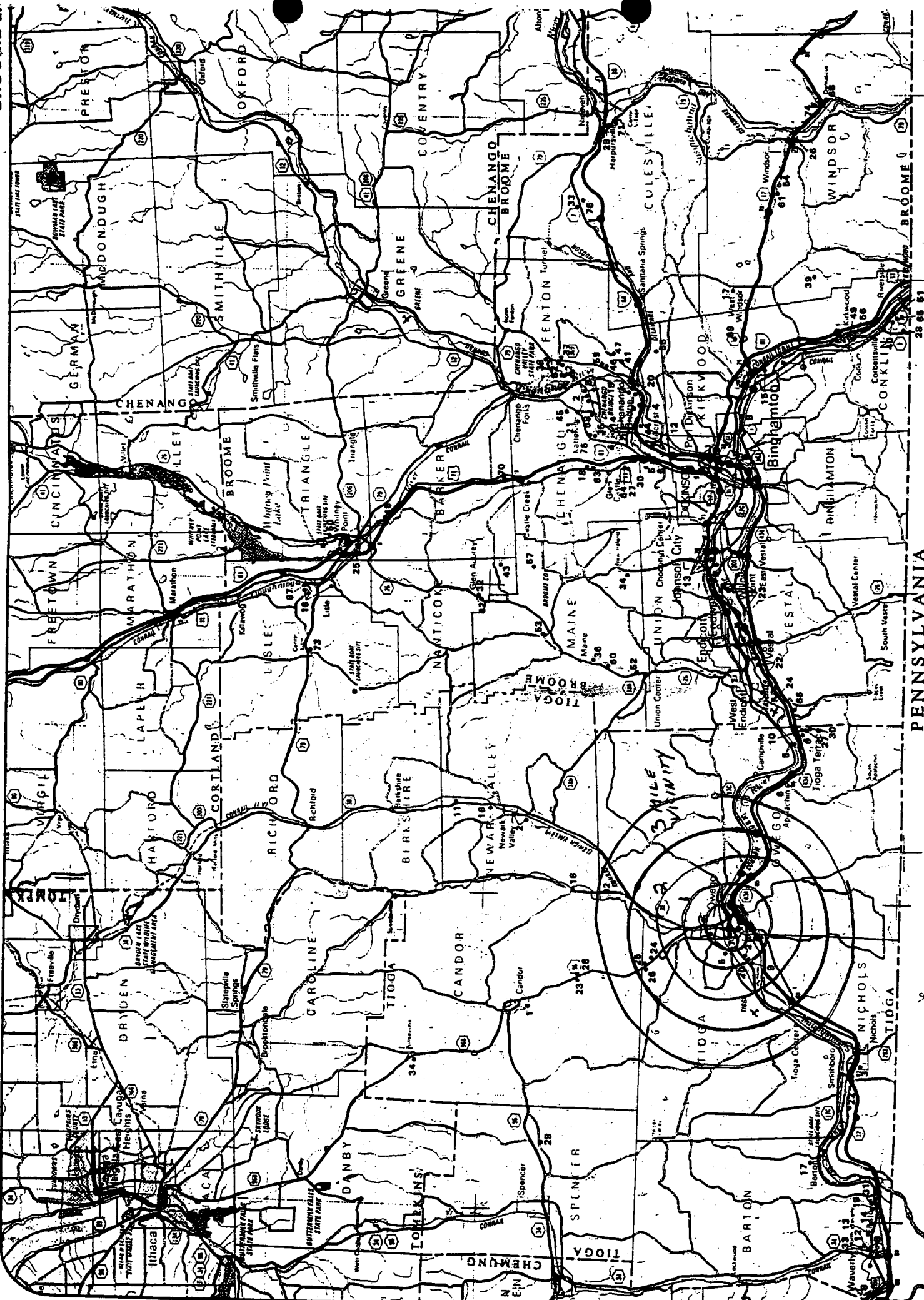
## SITE SCORE CALCULATION

	S	S <sup>2</sup>
GROUND WATER PATHWAY SCORE (S <sub>gw</sub> ):	22.8	519.84
SURFACE WATER PATHWAY SCORE (S <sub>sw</sub> ):	25.8	665.64
SOIL EXPOSURE PATHWAY SCORE (S <sub>s</sub> ):	1.6	2.56
AIR PATHWAY SCORE (S <sub>a</sub> ):	2.18	4.76
SITE SCORE:	$\sqrt{\frac{S_{gw}^2 + S_{sw}^2 + S_s^2 + S_a^2}{4}}$	
	17.27	

## SUMMARY

	YES	NO
1. Is there a high possibility of a threat to any nearby drinking water well(s) by migration of a hazardous substance in ground water? A. If yes, identify the well(s): <u>Nearby wells sampled &amp; no contamination attributable to this site was found.</u> B. If yes, how many people are served by the threatened well(s)? _____	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2. Is there a high possibility of a threat to any of the following by hazardous substance migration in surface water? A. Drinking water intake <input type="checkbox"/> B. Fishery <input type="checkbox"/> C. Sensitive environment (wetland, critical habitat, others) <input type="checkbox"/> D. If yes, identify the target(s): <u>Uncontrolled waste piles have been removed. On site soil sampling revealed no elevated migration from the site.</u>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>
3. Is there a high possibility of an area of surficial contamination within 200 feet of any residence, school, or daycare facility? If yes, identify the property(ies) and estimate the associated population(s): <u>Appalachian Middle School next door - but site is now fenced; sampling revealed no elevated soil contamination.</u>	<input type="checkbox"/>	<input type="checkbox"/>
4. Are there public health concerns at this site that are not addressed by PA scoring considerations? If yes, explain: <u>No: on the school grounds</u>	<input type="checkbox"/>	<input checked="" type="checkbox"/>





SCALE 1:250,000

9 MILES

NORTH

# TIOGA COUNTY

POPULATION	SOURCE
age 22]	Wells (Springs)
280.	Wells
60000.	Susquehanna River, Wells
2072.	Wells
680.	Wells
NA.	Wells
272.	Wells
225.	Wells
1868.	Wells
1897.	Big Hollow Brook Reservoir, Wells
45000.	Wells
3356.	Wells
17126.	Wells
104.	Wells
256.	Wells
500.	Wells (Springs)
90.	Wells
35.	Wells
40.	Wells
110.	Wells
180.	Wells
8760.	Wells
3700.	Wells
900.	Wells
1100.	Wells
1400.	Wells
250.	Wells
75.	Wells
30.	Spring
25.	Wells
NA.	Wells
170.	Wells
60.	Wells
25.	Wells
60.	Wells
150.	Wells
210.	Wells
200.	Wells
150.	Wells
360.	Wells
30.	Wells
120.	Wells
80.	Wells
36.	Wells
150.	Wells
46.	Wells
NA.	Wells
NA.	Wells
60.	Wells
NA.	Wells
NA.	Wells
NA.	Wells
NA.	Wells
NA.	Wells
NA.	Wells
63.	Wells
NA.	Wells
270.	Wells
NA.	Wells
1000.	Wells
68.	Wells
NA.	Wells
NA.	Wells
NA.	Wells
60.	Wells
40.	Wells
34.	Wells
44.	Wells
NA.	Wells
NA.	Wells
24.	Wells
NA.	Wells
NA.	Wells
NA.	Wells

## ID NO COMMUNITY WATER SYSTEM

### Municipal Community

1	Candor Village	1000.	Wells
2	Newark Valley Village	1400.	Wells
3	Nichols Water Company	500.	Wells
4	Owego Water District #2	2000.	Wells
5	Owego Water District #3	1400.	Wells
6	Owego Water District #4	1800.	Wells
7	Owego Water Works	5000.	Wells
8	Waverly Village	5255.	Dry Brook Reservoirs, Wells

### Non-Municipal Community

9	Airways Inn Trailer Park	200.	Wells
10	Bouton's Trailer Park	40.	Wells
11	Brookside Court	30.	Wells
12	Cedar Terrace Trailer Park	70.	Wells
13	El-Ba Trailer Park #1	100.	Wells
14	El-Ba Trailer Park #2	200.	Wells
15	Glenmary Estates	50.	Wells
16	Green Valley Mobile Home Park	120.	Wells
17	Hoffman Trailer Park	12.	Wells
18	Jolly J Mobile Home Park	150.	Wells
19	Maple Lane Trailer Court	200.	Wells
20	Maple Shade Trailer Park #1	45.	Wells
21	Maple Shade Trailer Park #2	40.	Wells
22	Nichols Carriage Manor	400.	Wells
23	Owego Contracting Company Inc.	30.	Wells
24	Owego Heights Mobile Home Park	200.	Wells
25	Pebble Hill Mobile Home Park	100.	Wells
26	Pine Tree Trailer Court	30.	Wells
27	Post Mobile Homes	300.	Wells
28	Route 96 Residential Park	99.	Wells
29	Saunders Mobile Home Park	30.	Wells
30	Stephens Trailer Park	120.	Wells
31	Sunset Trailer Park	126.	Wells
32	Valley Park Inc.	200.	Wells
33	Wagon Wheel Trailer Park	60.	Wells
34	Willseyville Mountain Side Estates	100.	Wells

5,500 POPULATION WITHIN 3 MILES OF SITE  
USING WELLS FOR WATER